

**MEETING MINUTES**  
**LIGNITE RESEARCH COUNCIL**

**June 20, 1996**

**Doublewood Inn, Bismarck, ND**

**MEMBERS (or their authorized alternates) PRESENT:**

Steve Benson	Energy & Environmental Research Center (EERC)
John Bluemle	ND Geological Survey
John Dwyer	Lignite Energy Council
Rich Fockler	Basin Electric Power Cooperative
William Goetz	State Senator
Albert (Mick) Grosz	ND House of Representatives
Bruce Hagen	Public Service Commissioner
Gary Halvorson	NDSU - Land Reclamation Research Center
Ron Haugen	ND Farmers Union
Terry Hilsted	Knife River Coal Mining Company
Kent Janssen	Dakota Gasification Company
Marlowe Johnson	Otter Tail Power Company
Douglas C. Kane	MDU Resources Group, Inc.
Merrill Lewis	Minnkota Power Cooperative
Harvey M. Ness	DOE - Morgantown Energy Technology Center
Chuck Reichert	BNI Coal, Ltd.
Martin Schock	ND Department of Health
Valdon Swanson	North Dakota Farm Bureau
John Weeda	Cooperative Power
Gordon Westerlind	United Power Association

**OTHERS PRESENT:**

Chris Anderson	EERC
Ed Englerth	Public Service Commission
Karlene Fine	Industrial Commission of North Dakota
Vicki Gilmore	Lignite Energy Council
Debra Pflughoeft-Hassett	EERC
Clifford R. Porter	Lignite Research, Development & Marketing Program
Vickie Steiner	Association of Energy Producing Counties
Radon Tolman	Environmental Energy Systems
Lyle Witham	Office of the Attorney General

Chairman John Dwyer called the Lignite Research Council meeting to order on June 20, 1996.

**Approval of Minutes**

Bruce Hagen made a motion to approve the minutes of the Feb. 21, 1996 meeting of the Lignite Research Council. Chuck Reichert seconded; motion carried.

**Update of Two Demonstration Projects**

Kent Janssen discussed Dakota Gasification Company's Ammonia Sulfate Project, which should be operational by October 1996. Dak Sul 45, an ammonium sulfate fertilizer, is recovered at DGC from the gasification of lignite and produced by removing sulfur compounds from stack gases. Janssen said the fertilizer contains nitrogen and sulfur that together can provide higher yields.

DGC's Ammonia Plant capital cost estimates increased \$25.8 million between August 1, 1995 and May 15, 1996 because of increases in costs for engineering, construction and refurbishing used equipment.

Reichert updated the members on the SynCoal Transloading System project. BNI Coal is awaiting the

Senate Finance Committee's action on a 2-year extension of Section 29 tax credits.

### **Lignite Research, Development and Marketing Program Updates**

Clifford Porter showed slides and distributed handouts to summarize updated information about the Lignite Research, Development and Marketing Program. From July 1, 1995 through June 12, 1996, there is \$13,969,834 in obligated funds for 21 projects (four Lignite Marketing Feasibility Studies, 16 Research Program projects and 1 Demonstration project). For the 1995-1997 biennium, there is an estimated \$3,540,047 available for all projects.

Porter discussed the Land Reclamation Research Center transfer. June 30, 1996 is scheduled to be the last day the LRRC will operate at its Mandan, North Dakota site. Continued administration of the program will be at the Department of Soil Science at North Dakota State University, Fargo, North Dakota. Dr. Lynn Brun, Department Chair, Department of Soil Science, will be curator of the LRRC's data sets and intellectual property. The data sets will be available through the Agricultural Research Station laboratory in Mandan.

Porter mentioned future dates of interest to the LRC. The Industrial Commission is to meet June 27, 1996 and October 17, 1996 to consider the LRC's recommendations for funding of projects. (Karlene Fine later announced that the Commission's June 27th meeting is rescheduled for July 18, 1996.) September 1, 1996 is the Grant Round XXV application deadline. The next Lignite Research Council meeting is scheduled for October 15, 1996 at the Doublewood Inn, Bismarck.

### **Externalities**

Lyle Witham briefly explained the current status of the Minnesota externalities case. The State of North Dakota, the Lignite Energy Council and other parties are challenging the Minnesota Public Utilities Commission's jurisdiction to apply values for CO<sub>2</sub> and mercury emissions. The Administrative Law Judge will hear oral arguments in the fall of 1996.

### **Grant Round XXIV Proposals**

Porter summarized Technical Peer Reviewers' comments and gave his Technical Advisor Recommendations for the following Grant Round XXIV project applications:

**LRC-XXIV-A: "Reducing the Management Variable in Assessing Reclamation Success"; Submitted by North Dakota State University/Land Reclamation Research Center; Principal Investigator - Gary Halvorson, Ph.D.; Request for \$16,118; Total Project Costs \$32,236. Completion Date: February 1997.**

LRC-XXIV-A's principal investigator, Gary Halvorson, explained that the project would show variable yields in bushels of wheat per acre between undisturbed and reclaimed lands due to variable farm land management practices. He said that because the decision to close the LRRC was made after the proposal for LRC-XXIV-A was submitted, a few changes will be implemented and the proposal's timetable will be revised. Porter said the Technical Peer Reviewers gave the project an average weighted score of 180 points out of 250, and he recommended the project be funded. Conflict of interest parties are The North American Coal Corporation, BNI Coal, Ltd., Knife River Coal Mining Company, MDU Resources Group, Inc., and NDSU's Land Reclamation Research Center.

**LRC-XXIV-B: "Technical and Economic Feasibility Study for Utilization of North Dakota Lignite Bottom Ash"; Submitted by Tri-Star, Inc.; Principal Investigator - Mark Flaagan; Request for \$10,000; Total Project Costs \$20,000. Completion Date: March 1997.**

Porter said this ash utilization marketing study will develop marketing and technical information to assist in the beneficial use of North Dakota lignite bottom ash produced at Cooperative Power's Coal Creek Station. The Technical Peer Reviewers' average weighted score is 192/250. Porter's Technical Advisor recommendation is to fund the study.

John Weeda commented briefly in support of the project.

**LRC-XXIV-C: “Activated Carbon for Environmental Applications”; Submitted by UND’s Energy & Environmental Research Center; Principal Investigator - Ronald C. Timpe; Request for \$39,600; Total Project Costs \$132,000.**

This lignite byproducts marketing study’s objective is to evaluate supercritical extraction as a method to produce an activated carbon from North Dakota lignite. As Technical Advisor, Porter said he agreed with the Technical Peer Reviewers, who recommended the project not be funded because it contains too many unknown factors and is a long-term research project. The average weighted score of the reviewers’ evaluations of the project was 167/250. Speaking in support of the project were Chris Anderson of EERC and Radon Tolman, president of Energy & Environmental Systems Inc., Santa Fe, New Mexico. The EERC is a conflict-of-interest party.

**LRC-XXIV-D – “Development of a Coal Combustion By-Products Utilization Workshop”; Submitted by Energy & Environmental Research Center; Principal Investigator - Bruce Dockter; Request for \$10,000; Total Project Costs \$30,250. Completion Date: December 1996.**

Porter said the purpose of this ash utilization workshop would be to increase the use of North Dakota lignite combustion byproducts by providing information on beneficial and economical uses of coal combustion byproducts. The workshop is planned for October 10-11, 1996, at Seven Seas Inn, Mandan, North Dakota. Porter recommended funding of this lignite byproducts marketing study. The Technical Peer Reviewers’ average weighted score was 203/250. The EERC is a conflict-of-interest party. Speaking in support of the project was its principal investigator, Debra Pflughoeft-Hassett of the EERC. Senator Bill Goetz questioned whether the workshop was an appropriate use of R & D funds. Dwyer also expressed concern that there was no direct lignite industry support.

#### **Financial Report**

Karlene Fine presented the financial report and distributed handouts concerning the following:

#### **Lignite Marketing Feasibility Studies:**

Fine indicated that \$204,719 remains for funding lignite marketing feasibility studies. (A \$400,000 appropriation was authorized for the ‘95-‘97 biennium.)

#### **Lignite Research Projects:**

Fine said the \$609,329 in funding available for the small lignite research projects might increase for Grant Round XXV (Sept. 1, 1996).

#### **Lignite Demonstration Projects:**

\$2,381,780 is still available for funding lignite demonstration projects this biennium.

#### **Lignite Research Program Administrative Budget for 1995-1997:**

\$440,355.63 remains from the \$670,000 that was budgeted for the current biennium.

#### **Lignite Research, Development and Marketing Program Budget Request for 1997-1999**

Fine said \$13,430,280 will be the budget request for the Lignite Research, Development and Marketing Program for the ‘97-‘99 biennium, based on a projected production of 59,600,000 tons. The budget request breaks down as follows: Marketing Feasibility Study Program: \$400,000; Clean Coal Demonstration Projects: \$1,341,000; Lignite Grants and Administration: \$11,689,280. An estimated \$13,030,280 in expenditures for lignite grants and administration according to the current 80%/20% split (including carryover dollars) breaks down as follows: Demonstration or Large Projects (80%): \$11,144,780; Research Projects or Small Projects (20%): \$1,485,500; Administration: \$400,000.

It was moved by Doug Kane and seconded by Chuck Reichert to recommend the 1997-1999 budget request to the Industrial Commission. Motion carried. Kane asked what will occur if the Office of

Management and Budget changes its numbers. Fine said she will amend the budget request if that occurs.

### **Other Matters**

Harvey Ness gave a brief update on the reorganization of the fossil fuel department at DOE. He said a resolution by Congress is expected within a month. The reorganization is to merge the offices of Pittsburgh Energy Tech Center (PETC) and Morgantown Energy Tech Center (METC) under a new name: Federal Energy Institute.

Bruce Hagen said that restructuring of the whole electric industry is coming, and it should be looked at as an opportunity.

William Goetz said policy issues for the upcoming legislative session should be addressed. He recently attended a conference at which the two main topics were telecommunications and deregulation of the electric industry.

### **Balloting for Funding of Proposals**

The LRC cast ballots to either recommend or deny funding of the four Grant Round XXIV proposals. Balloting results will be presented to the Industrial Commission for consideration when it reviews these projects on July 18, 1996:

LRC-XXIV-A: "Reducing the Management Variable in Assessing Reclamation Success"; 19 Recommend Funding, 1 Do Not Fund.

LRC-XXIV-B: "Technical and Economic Feasibility Study for Utilization of North Dakota Lignite Bottom Ash"; 20 Recommend Funding, 0 Do Not Fund.

LRC-XXIV-C: "Activated Carbon for Environmental Applications"; 4 Recommend Funding, 16 Do Not Fund.

LRC-XXIV-D: "Development of a Coal Combustion By-Products Utilization Workshop"; 16 Recommend Funding, 4 Do Not Fund.

### **October 15, 1996 Lignite Research Council Meeting**

The next Lignite Research Council meeting will be held October 15, 1996 at Doublewood Inn, Bismarck. The meeting will be a joint session of the Lignite Research Council and the Lignite Energy Council Executive Committee at a working luncheon from noon to 1 p.m. The LRC meeting will then continue until 3 p.m.

### **Adjournment**

There being no additional matters to discuss, the meeting was adjourned.

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Vicki Gilmore, Recording Secretary